

Minutes from the February 5, 2009 Montgomery County Biosciences Task Force Meeting

Attendance list appended at end of minutes

Ed Rudnick, Chair of the Tech Council, explained that David Mott asked him to chair the meeting due to a last minute scheduling conflict on David's part.

The minutes from the November 7, 2008 meeting were approved.

Dialogue on Fostering a Culture of Entrepreneurialism

Rudnick introduced Bruce Robertson, a managing partner at HIG Ventures, a venture capital investment firm. Robertson explained that he and Rachel King, CEO of GlycoMimetics, Inc., had discussed David Mott's invitation to talk to the task force about fostering a culture of entrepreneurialism and agreed the best approach would be in the form of an interactive dialogue.

Robertson gave an overview of the biotechnology areas that HIG invests in, which focus mostly on therapeutics and less on diagnostics. HIG prides itself on not mining the standard places like California and the Boston area for opportunities; in the last couple of years it has invested in companies based in Chicago, Atlanta, Canada (Vancouver, Toronto), Seattle, Austin, North Carolina (three deals) and Philadelphia (two deals). Robertson noted that HIG has not invested in any companies in Maryland – though not for lack of looking. He does not believe capital is a key problem impeding entrepreneurialism in this region.

Rachel King summarized her professional background. She said she has thought a lot about what contributes to the success of region in the biotechnology sector, and as an entrepreneur, is an optimist about the prospects of Montgomery County. Robertson said that he too is very optimistic. The biotechnology industry's development is an evolutionary process, and he noted that Montgomery County is at least 20 years behind San Francisco. As to why it hasn't gone faster, he observed that the County has its biggest boom around the mapping of human genome in about 2001-2002, which spun off several very large companies and generated a lot of international press about the biotech sector here. It also generated a lot of expectations about where things would go from there, and that Montgomery County would become the next San Francisco or Boston.

The reality is that the business models built around the genomic mapping research didn't work out that well. The good news is that most companies managed to transform themselves into drug development companies, which is where the value is. A participant asked why, then, deals aren't being done. Robertson responded that we took 10 steps forward and five steps back when the genomic business models became less viable.

Some early entrepreneurs left the region. Others didn't have the right skill set. Now there is a second generation of entrepreneurs building businesses – there are just not enough of them. Robertson believes that the key issue is people: the County has no lack of labs or academic institutions. But it does have a shortage of experienced entrepreneurs who have started companies before and who are bankable. When VCs meet with entrepreneurs who have done grown successful companies before and have a credible track record, they are willing to back them financially even if the entrepreneur is not able to answer all of their questions, and to enter into a partnership of building a business together.

King noted that we always talk about the County's assets – its federal labs, its universities. Excellent science and technologies come out of these, but, in general, not entrepreneurs. What she believes the region needs are great 'predecessor' companies. They are here because the leaders of these companies are here and want to stay here when they move on to start up new companies. MedImmune is an example of this – its leadership wanted to be here. The region is beginning to build a history, with progeny companies that came out of first generation of companies. The challenge for the County is to answer the

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question: if what you need are successful predecessor companies, what can state and local governments do to support and nurture them? The efforts that an economic development department can make are really only at the margins – they can provide a supportive environment. Entrepreneurs need a place where they can get together that has ‘Silicon Valley energy’ – where they can meet, talk and do deals. There is nothing like this in the DC metropolitan region – which may be partly because people are so spread out.

Robertson noted that the region has good scientific entrepreneurs, but not many that are ready to run a company. Capital gets excited when a good CEO type is committed to a new company. The one idea he has heard about that is interesting and seems to have potential is the concept of a ‘management institute.’ The general concept is that with big pharma consolidating and contracting and senior people leaving, there is an opportunity to tap into the expertise and experience of these people. Most are not in this region – but some are here. The model is that of an “executive chairman” - a lot of small start-up companies don’t need full-time CEOs.

There are a fair number of people out there who still have energy but are not looking for a full-time salary or job and who like being around exciting, promising companies. It may be possible for the County to help attract really good people who can help run early stage companies. Muzz Mansouri is an example of someone who is doing this – he devotes about 1.5 days a week per company. The challenge is how do you get these people here - asking them to pick up and move is not a realistic option. Of the three pillars, the management pillar is the biggest challenge. To the extent that a region has all three pillars, it’s important to pay attention to how they are commingling.

A task force member noted that he is seeing lots of companies that are getting funding through SBIRs. Many people coming out of NIH are looking for ongoing government support; there is interdependence with government in the region. Robertson said that seed capital for early stage companies is an issue, but noted that this is a national, not a regional problem. He added that VCs are thinking about exits at lower margins than they used to - \$150 million instead of \$500 million.

Another task force member commented that he hears that the universities are not entrepreneurial enough, and asked if the speakers think this is true. Robertson responded that Johns Hopkins University has had a reputation for being hard to work with, though they now have different people. He also noted that the University of Maryland president is trying to get more involved. The problem, he thinks, is that university technology doesn’t roll out on its own. It takes an entrepreneur to go in and figure out what’s there, and someone with a business background to help conduct the dialogue with the tech transfer office and serve as a sort of ‘broker.’ A participant observed that information deficiencies are a challenge for the local biosciences sector – there is a lack of intermediaries and brokers.

King said that it is hard to value companies in this industry. How do you facilitate a situation to allow the right combination of factors to come together? What can the biosciences community do together to increase the likelihood of growing successful companies? The public infrastructure is generally good. The public sector could, however, do more to work with universities to put on forums to help seed thinking and training.

The tech transfer working group of the state Life Sciences Advisory Board (LSAB) discussed these issues. On the university side, tech transfer offices tend to have a focus on the legal side – they are woefully unequipped with ‘internal brokers’ who can walk the halls and find the promising technologies. They are hiring the wrong people, and are also way below the national average in funding. Entrepreneurs found the university tech transfer offices onerous to deal with, especially when have to deal with more than one. The LSAB recommended exploring a ‘Bioscience Venture Fellows’ program that would bring in seasoned individuals who can serve as an outside counterpart to internal tech transfer brokers. They

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would be drawn from the ranks of former executives who no longer want to run a company full time or relocate, but can serve as a bridge.

Robertson commented that the quality of the broker matters – you need people who can discern the viable ideas and use VC's time wisely. This is a different idea from the Bioscience Venture Fellows concept. He said that he doesn't mind seeing eight ideas in a day of which only two are real prospects, as long as the other six aren't a waste of time.

A task force member suggested that if a lack of experienced entrepreneurs is the problem, would it be possible to put together a network of one – three people to address the identified deficiencies. You need to find out where the talent is – for example, through an entrepreneur in residence model. Robertson noted that they used to have this in their other HIG offices (though not in Maryland) and it works well if you can tie up someone good and give them some time to look for good opportunities. It is a cost to the venture fund that comes out of management fees.

King said that people don't move easily and it could only be good to have a larger local VC presence. While this is not the only thing, it does make a difference, and contributes to a dynamic where people are meeting, and getting together locally and readily.

A task force member who works for a VC noted that money does move easily and she is spending lots of time in Boston and California, which both have a stable of seasoned entrepreneurs. Finding good 'translators' who can work a deal before they parachute in one of their experienced entrepreneurs is a need. A lack of sufficiently matured technologies is also a perceived problem. There is a bias towards later stage techs, and a need for people who can work with a technology for 12-18 months and get it ready for VC funding. There is a disconnect between what entrepreneurs think is venture fundable and what VCs are looking for. An increase in translators/facilitators who have experience and understand more than one of dimension could help this.

Another task force member observed that he is hearing a consistent message: the greatest deficiency the region's biosciences sector has is the right personnel to manage early stage companies and help them grow. Most VCs are looking at later stage assets. His own company's biggest challenge is finding the right people. There is also not a sufficient talent pool of serial entrepreneurs. VCs come to him asking for advice about promising technologies.

How can the county/region take advantage of the current environment - in which a lot of big pharmaceutical companies are blowing up and experienced professionals are leaving – and create incentives to move them here and create new companies? Another task force member responded that the local biosciences sector can grow organically/internally –which will take time and patience and could take 15-20 years to mature, or it can acquire maturity and talent. He agreed with the previous speaker that the environment is ripe to attract senior executives. A participant responded that the biosciences sector in Montgomery County really requires a mixed model of organic growth of local companies as well as acquisitions.

Could the Tech Council play a different role, and engage in networking with CEOs in other states? Could state and county economic development departments identify senior people and help make introductions to promising companies? Ed Rudnic commented that he gets approached all the time by states that want to create what we have in Maryland. The Tech Council is moving into a more mature stage of advocating for its membership; its job is not to act as broker, but to be an advocate. He noted that the new MD Biotech Center is meant to serve as a clearinghouse, providing brokers and entrepreneurs with one stop

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information and services. He likes the idea of attracting senior talent and finding incentives to bring them here – this would help create energy to broker more deals.

Gaithersburg West Master Plan

Tom Street, assistant chief administrative officer for the County, discussed the County's vision for the new Gaithersburg West master plan as the creation of a dynamic, mixed-use scientific community that will be attractive to younger talent. Robertson commented that the County has a fabulous long-term vision that the local life sciences community can help sell. It is incumbent on this community to put a positive spin on the plan's vision - the County Council is hearing from a lot of naysayers concerned about the level of development proposed.

Council member Mike Knapp said that the challenge is what does the community want science here to be doing? If the dialogue about the Gaithersburg West master plan is treated simply as a land use discussion, people get caught up in the 'more density is bad' conversation instead of the question of what they want the community to be, and how biosciences support the realization of this vision. There is not broad understanding in the general community about the role of life sciences in the County's economy. The task force can play an important role in helping people understand what is necessary to make the industry successful here. They can help capture the vision and get people less focused on big buildings and instead have a conversation about the assets we have to build on.

A task force member responded that he does not think the sector plan should define specific scientific research areas to focus on, but rather should consider how to continue attracting talented people, and ensure that all of the components that define the regulatory pathway are here. If you explain the process of developing a drug to people, it helps paint a picture of what all the necessary parts are and gets them to understand what is needed. He suggested making a checklist to identify what is missing and what can be supplemented. For example, the lack of later stage manufacturing is a real deficiency. A task force member noted that a coalition of interested stakeholders is working to build support for the plan.

Tom Street asked for the names of task force members (and others in the life sciences community) that are willing to testify on behalf of the Gaithersburg West master plan. The following people volunteered: Henry Bernstein; Paul Fischer; Jack Khattar; Rachel King; Scott Koenig; David McDonough; Bruce Roberston; Robert Scheer; and Rick Zakour.

Update from the Subcommittee on NIH Conflict of Interest Rules

Brian Darmody reported that the subcommittee has only held one 'virtual' meeting at which they discussed existing rules regarding intramural research as well as new rules on grantees' research. The subcommittee agreed that it does not think it can make a direct assault on NIH rules. They looked at the Maryland model as one potential model for reforms at the federal level, and also discussed policies at other federal labs to encourage entrepreneurship. For example, at the Sandia National Lab in New Mexico, researchers can take leave to pursue entrepreneurial activities and then return to the lab. The subcommittee will look at policies at other federal labs as well, and explore the idea of a congressionally chartered foundation for technology commercialization. Tom Street suggested that the subcommittee meet with the County's congressional delegation to discuss the challenges they identify and some possible solutions. The delegation can then speak with Harold Varma and other science advisors in the Obama administration to get it on the administration's radar screen and agenda.

Ed Rudnic noted that the Tech Council and BIO have been chipping at this rock for some time. He proposed giving the subcommittee more time to refine its thoughts and then report back to the full task force with its recommendations (probably at the meeting after next) to see if they are ready for a conversation with the County's federal delegation.

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Update on the MD Biosciences Center

Larry Mahan of DBED explained that the MD Biosciences Center is intended to address an identified need for a central clearinghouse on all aspects of the state's biosciences industry. The Center has been created inside DBED and will initially draw from existing DBED resources so that it is not left to the legislature to get it started. Larry is the acting executive director and answers to the LSAB, which serves as the Center's board. He can hire people (13 initial staff positions have been identified), and has a relatively protected budget. In FY10 the Center will have formal funding and begin putting up new programs. It has already begun informal outreach.

One of Center's key goals is to better equip entrepreneurs with the resources they need to create sustainable companies. They are currently obtaining a number of databases – scientific, VC, IP, market assessment, competitive analysis, etc. – that will enable people to obtain a lot of free intelligence. They are also working to develop common applications and to streamline programs and requirements.

The Center will work to obtain infrastructure grants (some for universities), targeted particularly at putting in core infrastructure and facilities accessible to the business community. It will also work with TEDCO and other entities on grants for applied technical research. With regard to biotech workforce training, the state has good training providers, but there is a lack of coordination and information about where they are and what they do. The Center will wrap all of this information together to help companies identify appropriate training providers.

Ed Rudnic asked what the timeline is for an announcement from the governor with details about the Center's launch. Mahan responded that they are targeting February/March for an announcement; they want to open the Center with 90 percent functionality, and are aiming for an April start. He indicated that the Center will have locations that people will find "geographically amenable."

Mahan also mentioned a 'leader to leader' initiative in order to reach out and tap into the knowledge base of retiring life sciences executives – to do some of the things discussed at this meeting. They also plan to resurrect a program called MD Partners, which facilitates bringing CEOs together.

Other Issues

BIO has issued an urgent request for support for a proposal for small businesses to elect a one-time, accelerated use of a portion of their net operating losses (in exchange for giving up future NOL tax benefits) to help them get through the recession. Task force members are asked to contact Mikulski and Cardin's offices to express their support for this proposal.

Larry Mahan commented that there can be a negative connotation associated with this since it focuses on companies that are losing money. The concept of research and development tax credits became more palatable to the LSAB, since it rewards companies for investing in R&D. In its research for the LSAB, Battelle also found that this was a more palatable approach in other states.

Business Innovation Network

Ruth Semple, business development specialist with the Department of Economic Development, gave a brief presentation on the County's Business Innovation Network. She described it as a crossroads that brings together CEOs, entrepreneurs, venture capital and technical and financial resources to help promising start-up companies grow and succeed. There are currently over 38 companies in the Maryland Technology Development Center, the County's flagship incubator, and over 80 companies have graduated from the network. The County has opened a new innovation center every year for the last four years. The focus now is on continually improving programs and helping companies make better connections.

The meeting adjourned at 10:35.

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Attendees at the February 5, 2009 Meeting (non task force members noted with an asterisk)

Elaine Amir, Johns Hopkins University, Montgomery County Campus*
Henry Bernstein, Scheer Partners* (for Robert Scheer)
Mel Bernstein, University of Maryland
Brian Darmody, University of Maryland*
Stewart Edelstein, Universities at Shady Grove
Paul Fischer, GenVec, Inc.
Joyce Fuhrman, Montgomery County Council*
Pradeep Ganguly, Montgomery County Department of Economic Development*
Fizie Haleem, Montgomery County Department of Economic Development*
Peter Bang, Montgomery County Department of Economic Development*
Diane Jones, Office of the County Executive, Montgomery County*
Jack Khattar, Supernus Pharmaceuticals
Rachel King, Glycomimetics
Mike Knapp, Councilman, Montgomery County Council*
Scott Koenig, MacroGenics
Larry Mahan, MD Department of Business and Economic Development
David McDonough, Johns Hopkins University*
Bernadette Musselwhite, Montgomery County Department of Economic Development*
Janis Peters, Montgomery County Department of Economic Development*
Hercules Pinkney, Montgomery College* (for Dr. Brian Johnson)
Bruce Robertson, HIG Ventures*
Corinne Rothblum, Montgomery County Department of Economic Development*
Ed Rudnic, Tech Council of Maryland
Ruth Semple, Montgomery County Department of Economic Development*
Amita Shukla, NEA
Rick Soni, RexAhn
Tom Street, Office of the County Executive, Montgomery County*
Sally Sternbach, Rockville Economic Development, Inc.*
Ben Wu, MD Department of Business and Economic Development*
Rick Zakour, Tech Council of Maryland
Scott Zeger, Johns Hopkins University (via conference call)